

SWPP Technical Paper #3 - Significant Nexus

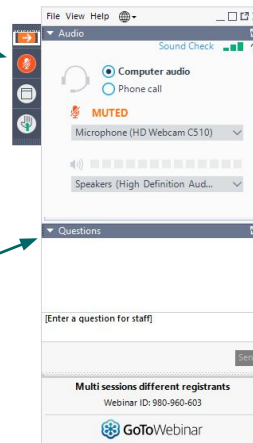
5/16/22



David Lelsz

Online Tools

- Muted
- Not Recording Today
- Use the Question Tool



David Lelsz

- Muted
- Not recording
- Question tool
- Sound Check
- We will have a brief Q and A session at the end of every section, try to restrict to the relevant section.
- Introductions
 - Theresa Gunn, Senior Lean Coach on ADEQ's Office of Continuous Improvement
 - Keith Pohs of
 - Jonathan Quinsey who is the Legal Specialist mastermind on the effort to create the new Surface Water Protection Program
 - Dr Erin Jordan of the Surface Water Quality Improvement Team
 - Justin Bern, who will turn the presentation over to next, who leads the Surface Water Protection Team. Justin?

Agenda



State Program Overview

Significant Nexus

Rulemaking Update

Schedule



Justin Bern

- The presentation from ADEQ today will cover an overview of the state program, significant nexus, an update of our rulemaking, process and schedule...(see slide above)
- We are covering lots of information in this presentation. After each section above, we will be pausing for 5-10 minutes for Q&A. Please keep the questions specific to that section of the presentation. We will have time at the end of the presentation for more general questions.
- Now I'll turn it over to Jonathan Quincy to run through the overview of the state program-



Clean Water Act Overview

What are Waters of the United States (WOTUS)?

The Intersection of State and Federal Law

Jonathan Quinsey

- Before we get into the weeds about ADEQ's Surface Water Protection program, which we refer to internally as SWPP, we wanted to spend a little time talking about the Clean Water Act and the necessity of determining the limits of Federal Jurisdiction in Arizona. Simply put, ADEQ cannot build an effective state-level program without building a bright line between waters regulated by the state-program and waters regulated by the federal-program.
- ADEQ has extensive experience implementing the Federal portion of our program that protects many of Arizona's most important rivers, streams, and lakes. We have historically regulated these important waterways in partnership with the USEPA and USACE through a strict implementation of the federal CWA. The regulatory programs mandated by the CWA include the regulation of discharges of pollutants to surface waters through the National Pollution Discharge Elimination System (NPDES) and regulation of the discharge of dredge and fill materials to surface waters by the USACE under § 404 of the CWA. In Arizona, ADEQ implements an EPA authorized program called the Arizona Pollutant Discharge Elimination System or AZPDES. You may hear some of the presenters mention NPDES or AZPDES in similar contexts

- today.
- A surface water must be a “Water of United States” or a WOTUS, to fall under the jurisdiction of the CWA and those programs. Thus, the question “what surface waters are WOTUS?” is a vexing and oft-litigated national question that has historically determined which of Arizona’s surface waters are regulated.
- The CWA itself does not define WOTUS. Instead, it provides discretion for the USEPA and the USACE to define WOTUS in their rules.



Pre-2015 Rule

Judicial Interpretations of the Currently Effective Rule

Implementation

Jonathan Quinsey

- The latest, *finalized (and that's a key word)* regulatory change to that WOTUS definition through a rulemaking action was announced on April 21, 2020, when the USEPA and USACE finalized the Navigable Waters Protection Rule (NWPR). I'm sure many of the stakeholders on the call today are familiar with this rulemaking.
- The NWPR was in effect for approximately 16 months before being vacated. On August 30, 2021, Judge Márquez of the United States District Court for the District of Arizona issued an order that vacated the NWPR.
- The vacature of the NWPR caused an immediate shift in the effective definition of WOTUS. After the vacature the EPA/USACE released a statement that read "In light of [the] order, the agencies have halted implementation of the Navigable Waters Protection Rule ("NWPR") nationwide and are interpreting "waters of the United States" consistent with the pre-2015 regulatory regime until further notice."
- This means that to establish that bright line between waters protected by the Federal program and waters protected by the state program, ADEQ must perform perspective jurisdictional evaluations that are consistent with the

- pre-2015 rule. The subject of the technical paper ADEQ just released and the focus of this presentation we're giving today is on something called "the significant nexus test." The "significant nexus test" is a weight of the evidence approach that ADEQ uses on a subset of waters where drawing that jurisdictional line between federal and state waters for the purposes of the SWPP rulemaking requires a more extensive analysis.
- As a side note for clarities sake, some parties refer to the pre-2015 WOTUS rule as the 1986 rule. ADEQ is using the term "pre-2015 rule" in this presentation today simply because it's the term that EPA uses.
- So unlike the definition of WOTUS, the idea of significant nexus wasn't created through the regulatory action of the EPA/Corps. The significant nexus test came from about from a supreme court case called Rapanos v. US. The judicial history is discussed in-depth in our technical paper if you're interested.
- In Rapanos Justice Kennedy concurring opinion said that for a water to be considered jurisdictional, it must possess a 'significant nexus' to waters that are or were navigable in fact or that could reasonably be so made." Justice Kennedy went on to say that determining a significant nexus requires a determination of whether the water in question – alone or in aggregation with other similarly situated waters in the region – significantly affects the chemical, physical or biological integrity of a traditionally navigable or interstate water or the territorial sea. In his opinion the word "significant" means "more than speculative or insubstantial."

State Program Overview



House Bill 2691 (2021)

Protected Surface Waters List (PSWL)

Rulemaking



Jonathan Quinsey

- With the significant nexus test in mind, I'm going to shift gears a bit to return the focus to the state-program ADEQ is establishing. Remember, one of the initial purposes of the SWPP program was to protect waters that could have potentially lost protection after the NWPR was passed. When the NWPR was vacated, ADEQ returned to a familiar regulatory regime in Arizona and the number of waters that could have potentially lost protection declined dramatically. One of the other main purposes of the SWPP rulemaking was to provide consistency and clarity about what waters are regulated in the state and how they're regulated.
- ADEQ is accomplishing that goal through the implementation of a new feature of our water protection programs called the Protected Surface Waters List that we will be adopting as part of the SWPP rulemaking. Importantly, HB2691 (2021) contains a legislative directive for ADEQ to list "All WOTUS" on the PSWL alongside all waters that will be listed for protected under the state portion of the program.
- In order to meet that requirement, ADEQ scientists have been busy building a brand new jurisdictional evaluation process that fits into the legal framework I

- discussed earlier. Our new jurisdictional evaluation process includes a lot of data that we're excited to share with you today and we're releasing the significant nexus technical paper so that we can receive feedback from the public about the process the agency is using. Erin Jordan, our surface water improvement value stream manager, is going to walk you through process in a bit.
- In addition to developing our own new process, ADEQ has also contracted with TetraTech to produce a handbook for public consumption that goes into even further detail about how significant nexus evaluations in Arizona will be conducted. Keith Pohs from Tetrattech will walk you through his work later in the presentation today.
- The technical paper that ADEQ shared with the public has also been reviewed by our Federal Partners. ADEQ planned a two-day problem solving event to work on the finer points of the paper with staff from the EPA/Corps that we're going to give a short briefing on today.
- So before I hand this presentation off to Erin, we built in a bit of time for questions before we dive into ADEQ's jurisdictional evaluation process. Like Justin mentioned at the beginning of the presentation, please keep your questions related to the material that was just covered. We want to keep things moving quickly today and we know we're getting into the weeds so if there are any questions about why ADEQ is performing these jurisdictional evaluations for the Federal program while we're adopting our state level program, please ask them now.



Questions?

<https://azdeq.gov/SWPP>

Questions regarding the Arizona program?

Jonathan Quinsey

Pitch to Erin!

Jurisdictional Evaluation Process



Evaluation of connectivity

Consideration of historical regulatory decisions

Is the a water an RPW?

Significant nexus test

Erin Jordan

The process that ADEQ uses to conduct jurisdictional evaluations begins by dividing surface waters into unique segments, known individually as a reach. A reach is a section of a stream or river along which similar hydrologic conditions exist. Each reach is assigned a unique identifier made up of numbers and letters called a Waterbody ID.

To evaluate a water for jurisdiction we first conduct a desktop analysis that uses various GIS tools and considers historic regulatory decisions, if available. In some cases, it is clear at the WBID is WOTUS. An example of this are the perennial streams that drain directly to the Colorado River. If further evaluation needs to be conducted, the team also looks at the flow regime of the WBID to determine if it is a relatively permanent water or RPW. RPWs are perennial or seasonally intermittent WBIDs. If these connect to a traditionally navigable water, also known as a TNW, then it is considered WOTUS. TNWs are waters determined by the Corps of Engineers to be WOTUS. However, if connectivity is still unclear, such as when an ephemeral WBID is between an RPW and TNW, then the WBID would need a significant nexus test to determine the likelihood of connectivity to a TNW.

I hope you all followed this. I recognize the evaluation process can get complex quickly. That is why it is essential to develop a robust process by which to conduct these evaluations. We have created a robust process to get us to the significant nexus text. What we are talking about today is how we intend to expand that process for the test.

Significant Nexus Technical Process



1. Physical Characterization



2. Climate and Normal Conditions



3. Data from Field Surveys

4. Results from ADEQ-Specific Tools

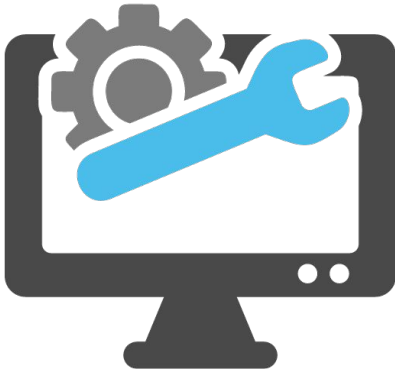
Erin Jordan

It is important to note that that significant nexus test will utilize a weight of evidence approach that is consistent with current law and the Supreme Court decisions regarding WOTUS.

And will consider...

- Physical characteristics of the water such as the
 - Length of the WBID and watershed size,
 - Threatened and endangered species habitat,
 - Presence of manmade structures, and the
 - Geomorphology of the area
- Climate can normal conditions that can influence flow in the region, increasing or decreasing transport of pollutants in a typical year
- Data from field surveys, which can also help us understand if elements are present in a WBID that could support downstream habitat to wildlife
- And, results from tools that ADEQ developed

ADEQ-Specific Tools



Riparian Vegetation Tool

Groundwater Tool

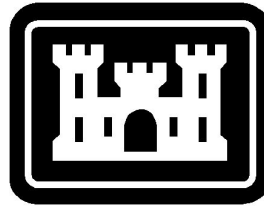
Snowpack Tool

<https://azdeq.gov/flowregimes>

Erin Jordan

For example, ADEQ developed three tools to help us model the probability of (or lack thereof) of intermittent flow in a WBID. We don't use these to assign flow regimes, but the results of these tools can be used to indicate the possibility of reliable flow in a WBID in any given year that could transport pollutants downstream. I would like to just brag on the team that developed these tools a bit. One member of the team is at the National Association of Environmental Professionals annual conference this week to accept the award for Best Available Innovative Technology.

Federal Partners



**US Army Corps
of Engineers®**

Erin Jordan

And, we are not doing this in vacuum. In addition to meeting with and considering input from the public and stakeholders, we are working closely with our federal partners. We have regular meetings to discuss jurisdictional evaluations, including the results of evaluations and the development of tools and processes why which we are conducting these evaluations. We also help a problem solving event focused specifically on significant nexus with the EPA and the Corps in February. The purpose of these ongoing conversations is to

- Building mutual understanding on rule and roles across all agencies (EPA/USACE/ADEQ)
- Understanding all available data sources that can be used in evaluations
- Input from our partners on ADEQ's processes

In addition to our meeting with the EPA and the Corps, we contracted with Tetra Tech, an international consulting company, to assist ADEQ in creating an Arizona-specific significant nexus guidance. Keith Pohs from Tetra Tech also attended the event and he is here today to talk a little about what the work he has been contracted to do for ADEQ.

Toss to Keith

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Goal: Develop a succinct and scientifically sound evaluation process “independent” of policy

- Clarify ADEQ, EPA, and USACE Roles and Responsibilities
- Summarize Clean Water Act policy and legal action
- Identify data sources and key considerations utilized in desktop and field investigations
- Determine key factors and data sources for a significant nexus test

Keith Pohs

Toss to Erin for Q&A



Questions?

<https://azdeq.gov/SWPP>

Questions regarding evaluation process?

Toss to Jonathan

Summary of Rulemaking Plan



Limited Modifications to Appendix A and B

SWPP and PSLW Adopted in Article 2

EPA Review of Article 1 Modifications

Ongoing Federal WOTUS Rulemaking and Supreme Court Litigation

Jonathan Quinsey

- As the informal portion of the SWPP rulemaking is drawing to a close, ADEQ is honing in on our final rulemaking plan for the SWPP. Much of this is addressed in our Water Quality Standards paper that is up on the website.
- ADEQ will make changes to Appendix B as part of this rulemaking. Waters that ADEQ determines to be non-WOTUS that were previously listed on Appendix B will be removed from being listed in Article 1. Some, but not all, of those waters will be listed to be protected under the State program in the PSLW in Article 2. ADEQ will also modify Appendix A as part of this rulemaking to align our individual pollutant parameters across both Federal and State permits. ADEQ does not expect any other changes to the Federal program as part of the SWPP rulemaking.
- I want to once again direct you towards our Water Quality Standards paper for more information, but ADEQ is still working through the EPA approval process for the 2019 triennial review. ADEQ submitted the regulatory modifications made during the 2019 triennial review to the EPA on November 19, 2019.

- During the review process, EPA signaled to ADEQ that a non-trivial number of individual pollutant parameters developed by ADEQ and listed in Appendix A for certain designated uses would be disapproved as they did not meet the requirements of the CWA.
- ADEQ submitted a request to formally withdraw portions of the 2019 Triennial Review on December 21, 2021. Specifically, ADEQ withdrew modifications of the individual pollutant parameters established in Appendix A, Table 1 for the domestic water source, fish consumption, full-body contact, and partial body contact designated uses from review. The EPA signaled that the Federal government could not approve these standards for individual pollutants due to incorrect assumptions ADEQ made during their development. ADEQ is committed to resolving those issues before submitting the next triennial review package to the EPA.
- As part of the EPA's concurrence with ADEQ's partial withdrawal of the 2019 TR, EPA did take some action to approve changes to WQS in the 2019 TR that ADEQ did not withdraw. The EPA has approved the revisions to the definitions, antidegradation, mixing zones, and variance standards adopted in 2019 on January 24th. The EPA also approved portions of ADEQ's submittal that made minor formatting revisions and other corrections that were non-substantive.
- The EPA has not acted on the changes to the 2019 TR individual pollutant parameters in Appendix A, Table 1 for the aquatic and wildlife cold, aquatic and wildlife warm, aquatic and wildlife ephemeral, aquatic and wildlife effluent-dependent water, agricultural irrigation, and agricultural livestock watering designated uses. The EPA originally signaled to ADEQ that they expected those changes to be approved this summer. That timeline has now been modified. ADEQ does not currently expect Federal action on those changes to be made before the SWPP rulemaking is completed. The lack of action makes the modifications that will be made during the SWPP rulemaking extremely important.
- ADEQ will adopt the water quality standards for non-WOTUS protected surface waters in Article 2 of Chapter 11. This will keep the PSWL and the state program outside of the rules that are required to be reviewed by the EPA. Our interpretation of the enabling authority of the SWPP is that we are directed to disentangle the state program from Federal review in whatever way possible.
- Additionally, ADEQ is monitoring ongoing Supreme Court litigation that may have an impact on the definition of WOTUS. I'm sure

- most people on this call are aware, the Court agreed to take a case where they will likely revisit the 2006 Rapanos decision that resulted in the two opinions that imagine different legal standards for determining what are and are not (“WOTUS”). ADEQ does not have any information about how that case is progressing. There is the potential that a Supreme Court decision in this case would have a significant impact on the scope of the SWPP rulemaking.
- ADEQ is also engaged with the EPA and Corps regarding the ongoing WOTUS rulemaking that was filed this year. You can find copies of the comment letters we’ve sent to federal agencies on our website. Although the rulemaking is not yet finalized, in its current form ADEQ does not expect the changes to the WOTUS rule that the agencies have made to have a significant impact on the SWPP in their current form.
- The line between the Federal and State program in Arizona will likely remain blurred for some time. ADEQ is continuing to prepare for a WOTUS definition that may change and the agency isn’t just sitting on our hands as the scope Federal rule changes. We have a few projects we’ve been working on to help ensure that the agency can provide clear and consistent, on the ground regulation despite anticipated changes in the Federal program.
- Throughout the SWPP rulemaking, ADEQ has made significant investments in developing processes and tools to help us evaluate Arizona waters to better understand potential jurisdiction. Erin spoke at length about these today and you can read about in this Significant Nexus technical paper. The award winning tools that we’re developing as part of the SWPP rulemaking are going to help ADEQ make WOTUS determinations no matter what the happens to the definition of the term.

We are dedicated to building a nimble Clean Water Act program during these times of regulatory whiplash. One of our most important projects nearing completion is a database that integrates all of our current systems for surface water information.

The new water quality database will allow us to respond to requests for information and add transparency to the data ADEQ uses to make jurisdictional determinations. The “rough draft” of this database is already done and ADEQ is will have the new system implemented before we file an NPRM for SWPP. We’ve also been working with U of A to create a catalogue of historical documents

Surface Water Protection Program Rulemaking Timeline



azdeq.gov/swpp

Jonathan Quinsey

- ADEQ is nearing the end of the informal portion of our SWPP rulemaking. The technical papers regarding the economic, social, and environmental cost/benefit analysis and best management practices for the SWPP will be released soon. We encourage any interested stakeholders to visit the ADEQ website and read the SWPP technical papers. These papers outline the process ADEQ will use to build the rules you'll see in our NPRM. The best way to make your voice heard in this process is to engage directly with the technical papers we release.
- ADEQ will begin the formal rulemaking process next month, but you don't need to wait until then to get involved. I encourage everyone on this call to read the technical papers we've published and review the tools that we've created. ADEQ has been extremely deliberate in publishing a step by step process of how we'll make decisions for the SWPP. We believe that a great process builds great results. Please take the time to comment on that process before the draft rule language comes out.
- That generally wraps up our presentation today but before we close out, we're going to do one last Q and A for any questions you might have regarding the

- rulemaking or any of the other subjects we've covered today.



Questions?

<https://azdeq.gov/SWPP>

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